VDP SIMULATOR v1.1

iOS 7.0 and above

USER MANUAL

The VDP SIMULATOR FOR TRAINING PURPOSES ONLY.

IT IS YOUR OWN RISK TO USE THE VDP SIMULATOR PROGRAM.

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VDP SIMULATOR V1.1

The VDP Simulator calculates VDP (Visual Descent Point) from entered data and simulate VOR and VDP position on the screen.

The VDP Simulator program for iPhone and iPad (iOS 7.0 and above required)

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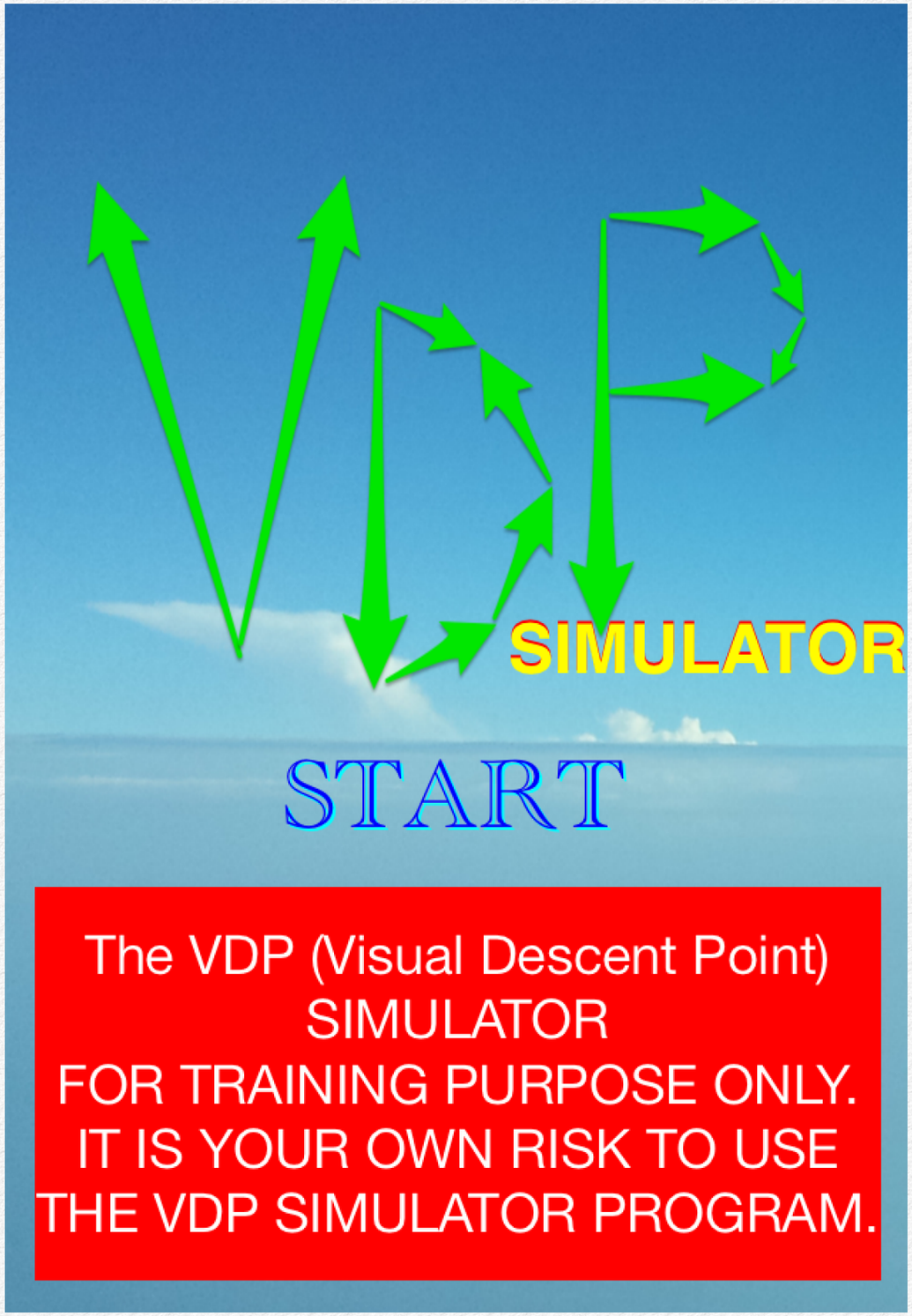
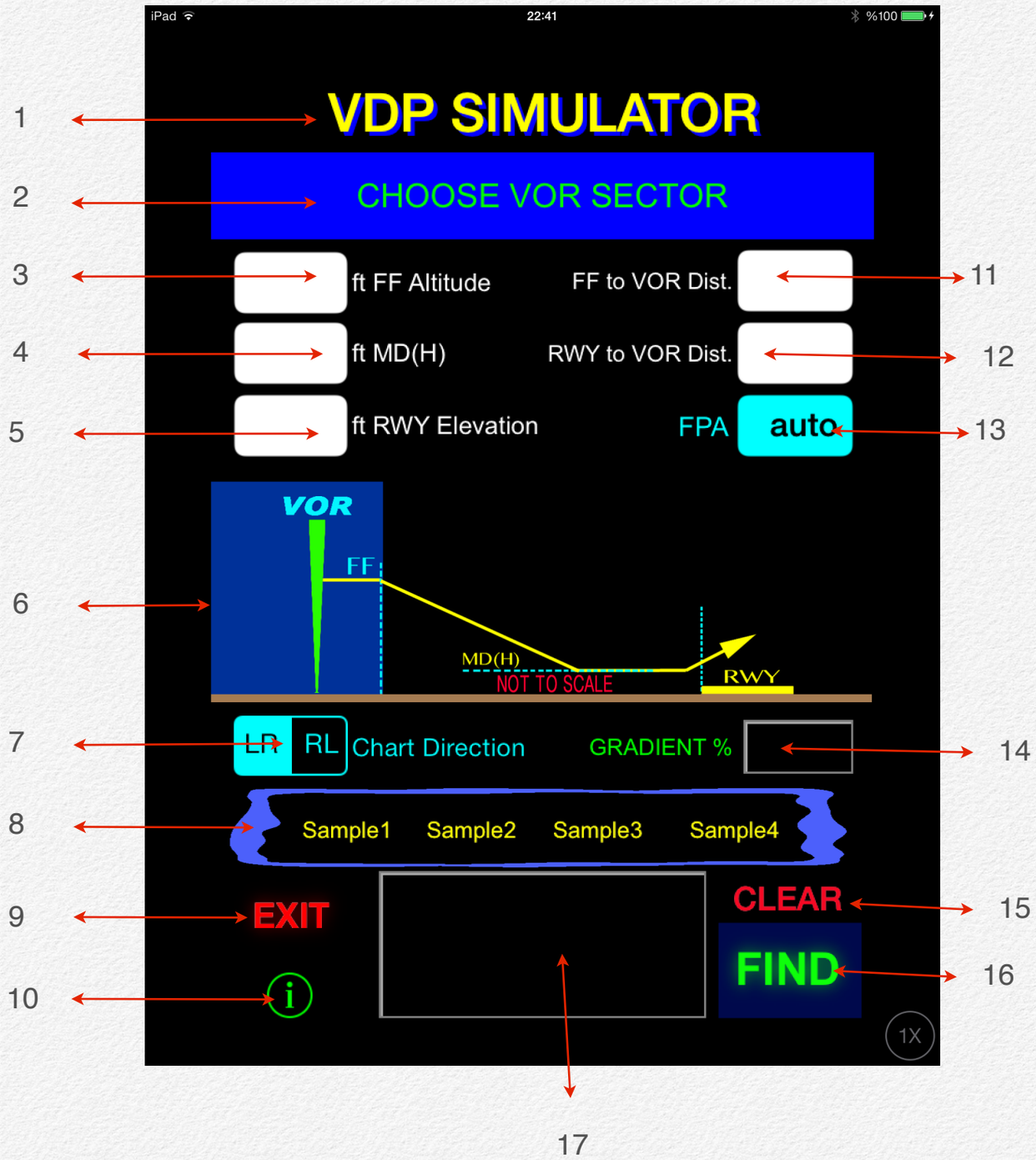


VDP SIMULATOR DETAILS



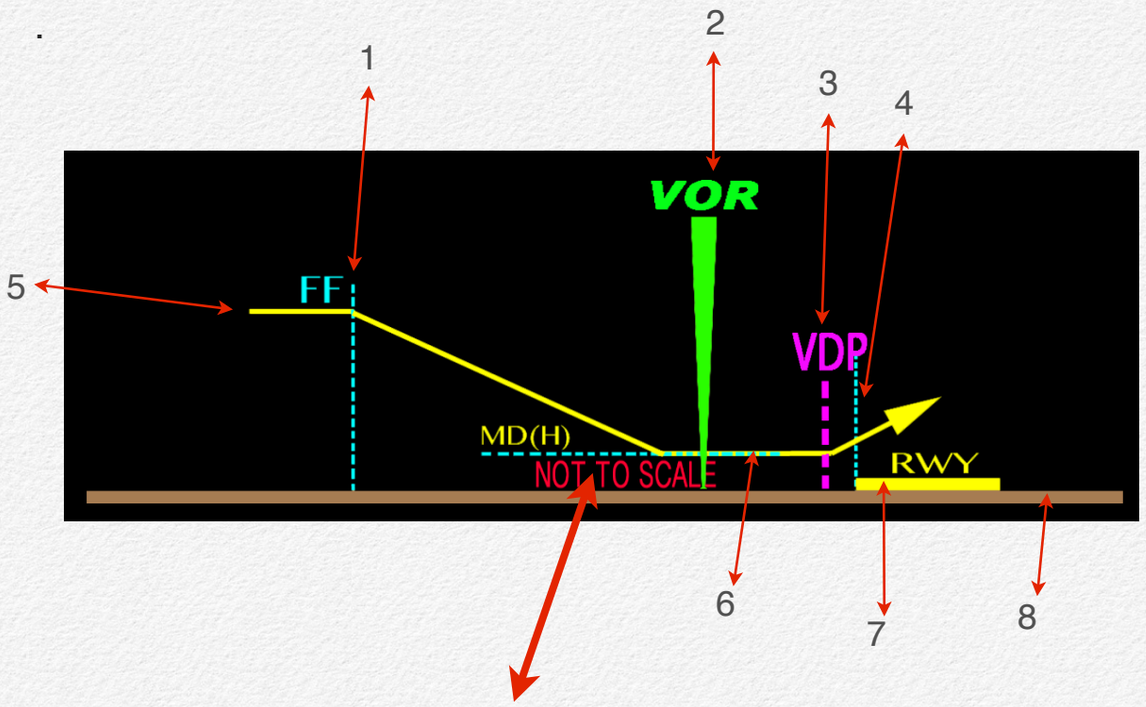
	Type or Value	EXPLANATION – VDP SIMULATOR
1	Text	Program name and Brightness Control (slip your finger)
2	Text	Message Panel and Brightness Control (slipslip your finger)
3	Text - Feet	Final Fix Altitude
4	Text - Feet	Minimum Descent Height MD(H)
5	Text - Feet	Landing Runway elevation
6	Graphic	Simulator Screen; simulates VDP and VOR position from entered values
7	Selector	Simulator Chart Direction Selector. LR:Left to Right; RL:Right to Left
8	Samples - Button	First select a sample than FIND button
9	Button	END the Program
10	Button	Open The Info Page
11	Text - DME (nm)	DME Distance from VOR to FINAL FIX
12	Text - DME (nm)	DME Distance from VOR to RUNWAY
13	auto or Text	**FPA auto:** The program calculates FPA Automaticaly from entered data **FPA Selected:**If The User enters FPA value, the program calculates VDP according to entered (Selected) FPA Value.
14	Label - %	The Program calculates Gradient from entered values
15	Button	Clear Button Clears user entered values. The Chart direction not change.
16	Button	FIND Button starts to VDP Simulator program to find VDP Distance.
17	Label – DME (nm)	DME Distance from VOR to VDP (Visual Descent Point)

Remark

Text : User can enter Value

Label : User can not change the value

SIMULATOR SCREEN DETAILS



Simulator Screen Chart is not to scale

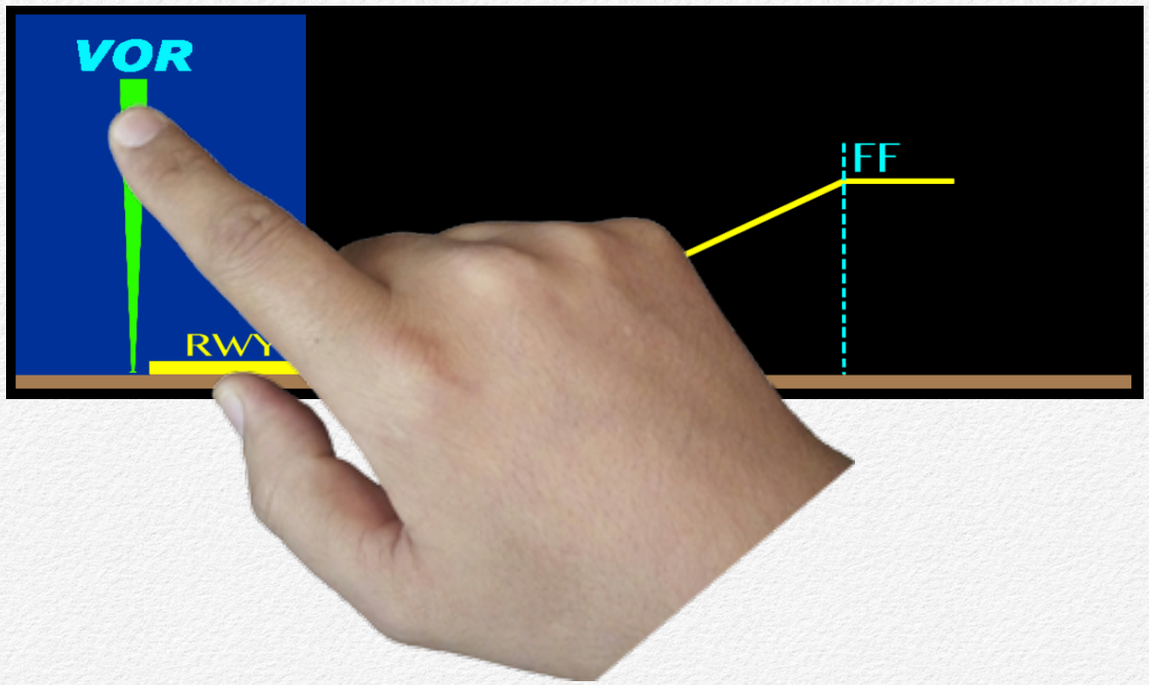
	Type or Value	EXPLANATION of SIMULATOR SCREEN **** NOT TO SCALE****
1	Feet	Blue line indictes FF position and DME Distance from VOR to FINAL FIX
2	Symbol	VOR Position According to entered Values in Selected VOR SECTOR
3	Symbol	VDP Symbol and dashed line indicates VDP position on the simulator chart
4	Symbol	Blue dot line indicates Runway beginning and DME Distance from VOR to RUNWAY
5	Feet	Final Fix Altitude
6	Feet	MD(H) Minimum Descent Height
7	Feet	Runway Elevation
8	N/A	Ground Symbol

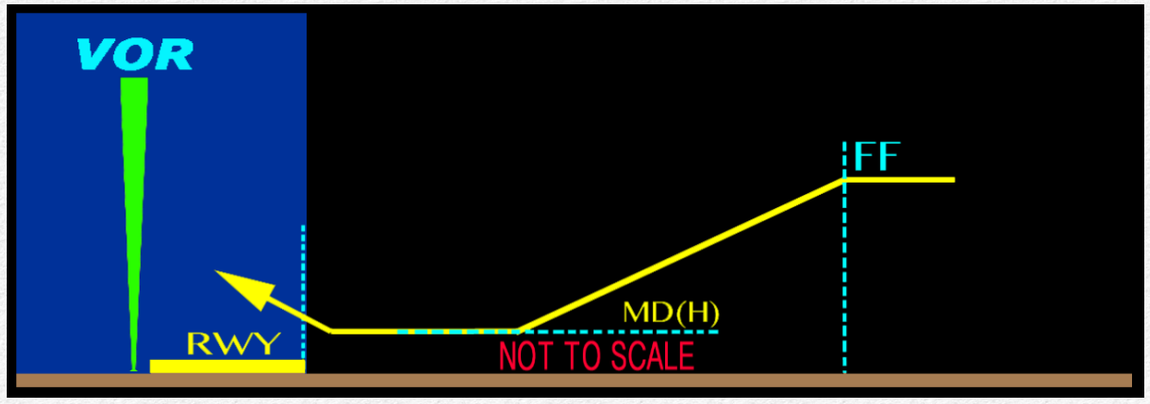
VOR SECTOR SELECTION

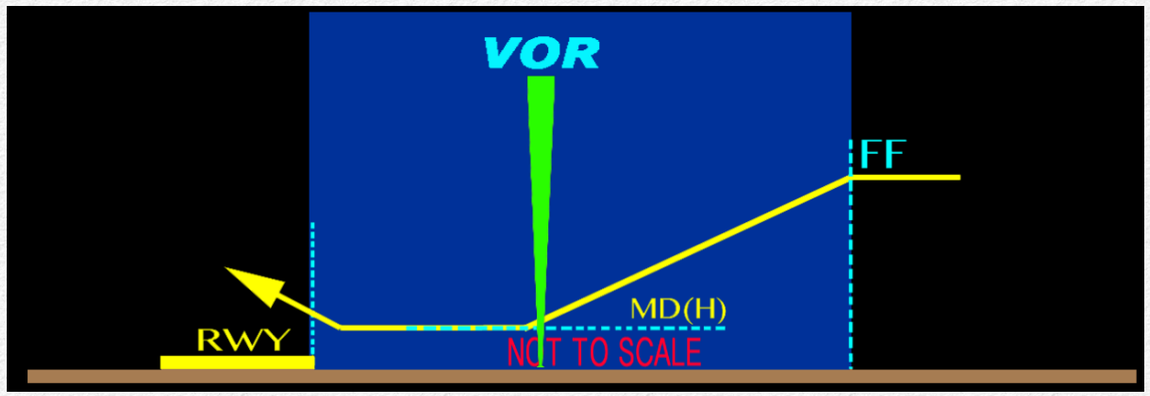
VOR Sector Selection is most important thing on the VDP Simulator.

Because Simulator logic calculates the entered values according to VOR SECTOR

Slip your finger to change VOR SECTOR







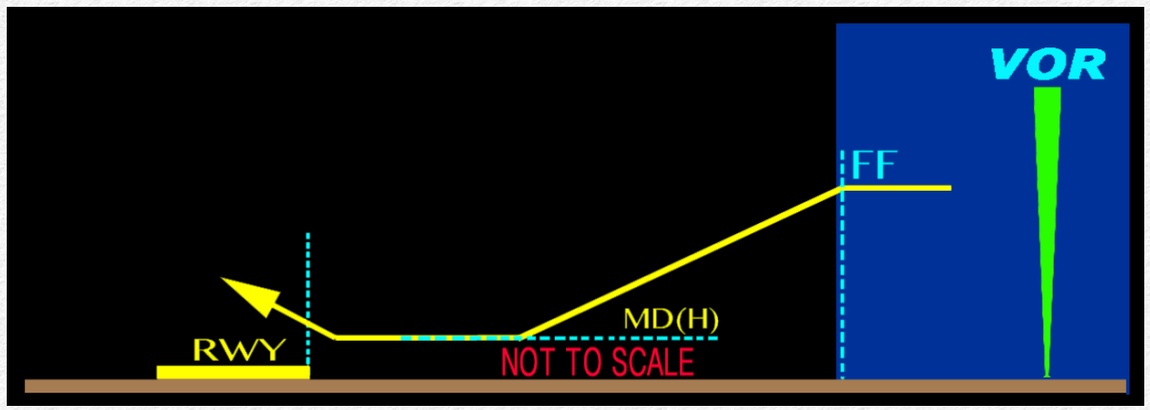


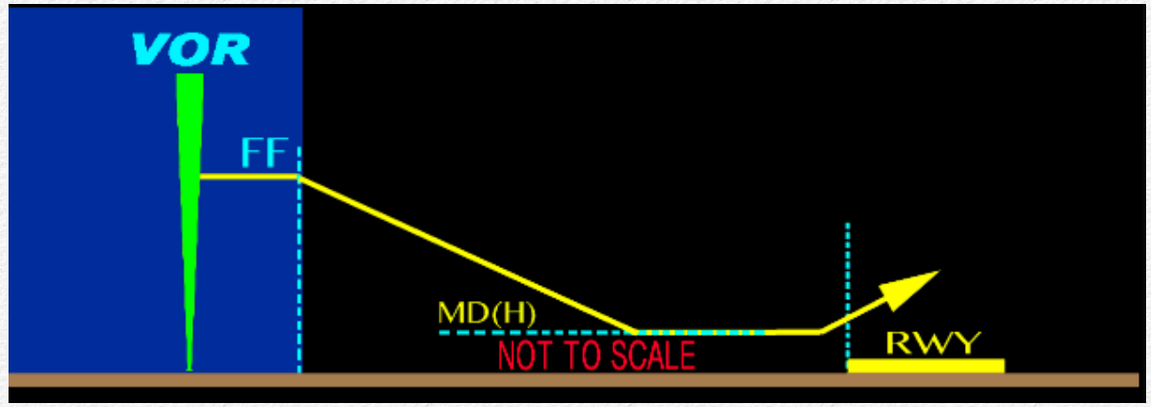
CHART DIRECTION

Chart Direction

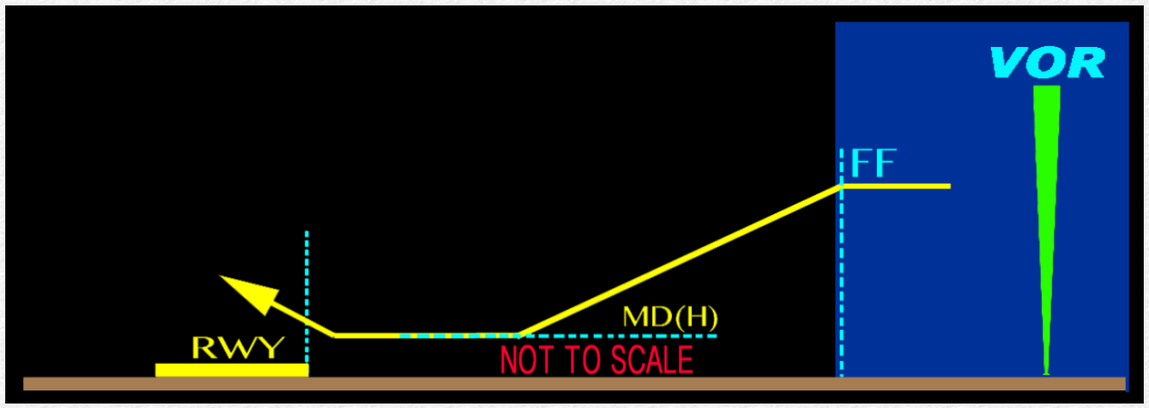
LR : Left to Right

RL : Right to Left

LR : Left to Right Selected



RL : Right to Left Selected



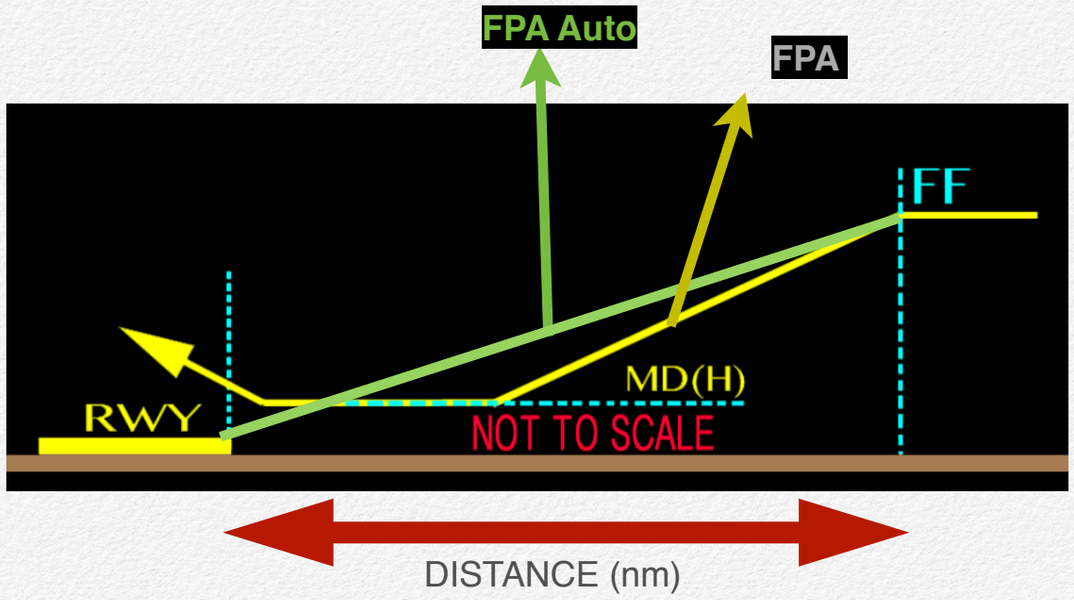
MESSAGE PANEL

CHOOSE VOR SECTOR	Choose VOR Sector First
VOR AFTER RWY	When you select VOR Sector you can see details according to RWY and VOR relation.
VDP BEFORE VOR	After VDP Correctly Calculated, Message screen gives information of VDP distance; VDP BEFORE VOR
VDP AFTER VOR	After VDP Correcty Calculated, Message screen gives information of VDP distance;AFTER VOR or;
VDP EQUAL TO VOR	After VDP Correctly Calculated, Message screen gives information of VDP distance;VDP EQUAL TO VOR (VDP OVER VOR)
VDP crossing altitude higher than MD(H) with Selected FPA	If you use SELECTED FPA , simulator calculates own FPA and check both FPA, if your selected FPA less than Simulator FPA “this means YOU WILL CROSS VDP DISTANCE HIGHER THAN MD(H)” then message panel gives you this red message
FPA HIGH	FPA higher than “FPA 4.4” and lower than “FPA 5.5”
CHECK YOUR FPA	FPA higher than “FPA 5.5”

MESSAGE PANEL - 2

Entered distance of “Final Fix to VOR” and “Runway to VOR” not correct on SELECTED VOR SECTOR	WRONG VOR SECTOR
Simulator can not continue VDP calculation due to MISSING INPUT	ENTER MISSING DATA
Entered MD(H) and “Runway Elevation” and “Final Fix Altitude” check is NOT CORRECT	CHECK MD(H)
Entered “RWY Elevation” and “Final Fix Altitude” check is NOT CORRECT	RWY Elevation higher than FF ALT - MD(H)

VDP FORMULE



Altitude (ft) = (FF Altitude - (RWY Elevation + 50 Feet)

Distance (nm) = (Final Fix to RWY)

$$\text{GRADIENT (\%)} = \frac{\text{Altitude(ft)}}{\text{Distance(nm) X 60}}$$

FPA = GRADIENT(%) X 0.57°

FPA auto : IF **FPA < 3°** then **FPA = 3° (minimum FPA)**

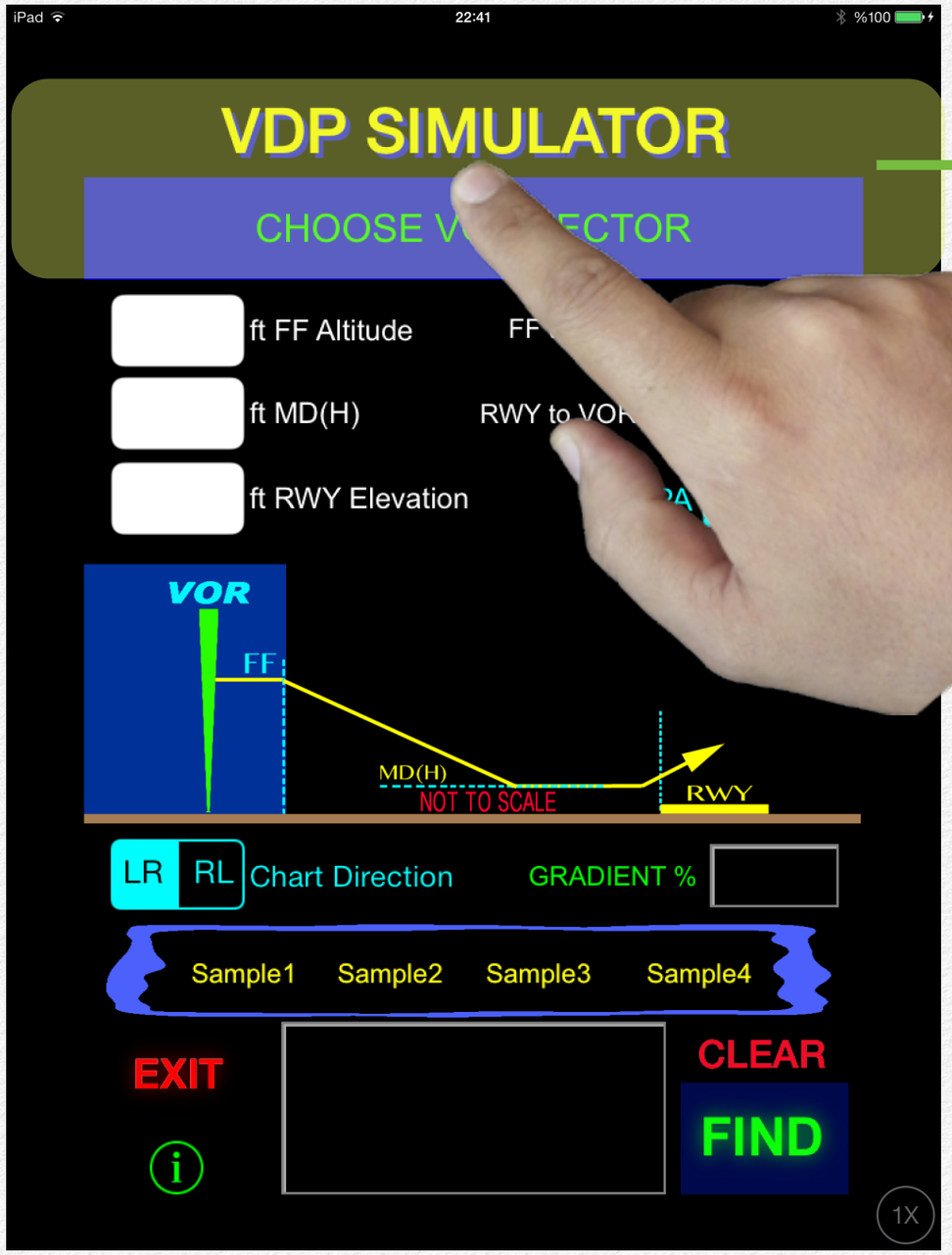
FPA Selected : USER ENTERS THE FPA

VDP FROM RUNWAY (nm) = (MD(H) / (FPA X 100)

VDP SIMULATOR

GIVES VDP DISTANCE FROM VOR

BRIGHTNESS CONTROL



Brightness Control Area;

User can control the brightness of iPHONE or iPAD via slip your finger on this area.

Left to Right Slip : Increase Brightness

Right to Left Slip : Decrease Brightness

CONTACT PAGE

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